

EXCEL MODULAR SCAFFOLD AND LEASING CORP.

INFORMATION FACT SHEET

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SUBJ: Excel modular system scaffold support for reducing labor expenditures associated with any type of staging applications during construction or maintenance projects

ENCL: A) VHS tape covering : "Safety with Excel"
B) Performance Overview On Excel Modular System Scaffold Material
C) Excel's capabilities brochure

Enclosed you will find detailed technical data on Excel's capabilities for your review that will assist your organization with completion of their new technology evaluation. Excel is a high tech, positive locking, modular designed system scaffold material that is capable of dramatically improving and upgrading the quality and efficiency of any existing scaffold erection program without the client having to make a sizable capital investment. While supplying Excel system scaffold material to various industrial job sites, Excel has also been able to provide our clients with qualified scaffold specialists to assist with cross training of customer and vendor scaffold builders during shutdown and balance of plant periods. Excel is an improved modular system scaffold material design that eliminates previous staging short comings while capitalizing on ideas and ingenuity generated over the years by seasoned craft carpenters, laborers and supervisors. Since commencing production, the advanced tech Excel design has proven itself capable of dramatically lowering your total scaffold manhours and the associated labor expenditures while reducing critical path time for maintenance work activities in industries that include: pulp wood plants, refineries, chemical processing and manufacturing, power production, ship yards, Etc. Excel will give your organization the ability to tailor their scaffold engineering designs to meet almost any configuration or application that would ever be encountered during facility maintenance evolutions.

We just finished filming our new Excel system scaffold safety training video which can be utilized for indoctrination and familiarization of craft carpentry personnel that would be responsible for the erection of Excel system material at your facility. It can also be used to provide workers (users) with an overview of what to look for during their routine scaffold inspections before they climb on any staging to perform their assigned work activities. The new safety training video is approximately nineteen minutes in length and gives your management decision makers a quick overview on why Excel is so simple to use and quick to erect, with excellent flexibility characteristics as compared to the older tool dependent material (i.e.: tube & clamp) that you are currently using. Highlights of the new Excel safety training video that would be of interest to your organization include the following areas :

- * Overview of Excel modular components
- * Movement and storage of material
- * Job walk downs and pre job briefings
- * General construction requirements and cautions
- * Installation of hatchways, gates, intermediate brackets
- * Erection and safe utilization of rolling towers
- * Construction of preapproved lifting rigs using trusses
- * Inspection and tagging criteria

Excel just successfully completed their formal seismic testing and qualification at Wyle Laboratory in Huntsville, Alabama to certify Excel for utilization in all safety related areas of commercial, DOE, and DOD nuclear power plant facilities. To the best of our knowledge Excel is one of the only organizations to successfully perform a full scale shake out bench test and qualification in strict accordance with the IEEE seismic test standards on any type of modular system scaffold material for nuclear plant use. Historically, all previously existing seismic qualification programs and construction procedures have been based on results and calculations obtained from computer modeling, engineering analysis or grand-fathering predicated on previous data from existing tube and clamp design staging equipment. Excel's seismic testing and certification should help your organization when they are comparing the different types of scaffold material currently available in the market place to complement or replace their existing tube and clamp inventories. Also available upon request are copies of both the Wyle Labs test report and the Excel safety training video which both contain seismic testing related data pertinent to using Excel for construction inside safety related areas. Highlights of the seismic testing and technical qualification completed by Wyle Labs are listed below:

- * Totally independent testing conducted in strict compliance with Wyle procedures
- * Utilized Triaxial seismic simulator which allows testing of 3 axes simultaneous
- * Qualification in accordance with IEEE Standard 344-1987 (Class 1E Equipment)
- * Successfully conducted four independent test series at 6+, 30 second runs each
- * Exact same material was used during the entire testing process, no change outs
- * Aging process during testing was equivalent to material being used for 160 years
- * Specimen was subjected to thirty (30) simulated operating basis earthquakes
- * Sample scaffold structure was tested to the maximum machine limits possible
- * Resonance search test produced no resonance response phenomena below 5 Hz

We believe that Excel has introduced the only significant change to take place within the scaffold industry during the last ten to twelve years. Additionally, you will find enclosed detailed technical information regarding Excel's capabilities that were demonstrated during a recent Excel scaffold demonstration that was completed in Nashville, TN using experienced craft personnel from the Gulf Coast Refinery Industry. Significant highlights of that taped (video available upon request) Excel demonstration which would be of interest to your organization are as follows:

- ★ No tools are used during erection and removal
- ★ Will meet new OSHA handrail requirements for year 2000
- ★ Extremely easy to erect for first time users
- ★ Scaffold tower is very stable with little to no movement
- ★ Utilized just two qualified scaffold builders
- ★ Tower was a standard 5'x7'x15' plus handrails

- ★ Tower was comprised of only seventy five pieces
- ★ Erection was completed in just under fourteen minutes
- ★ Dismantling was completed in less than nine minutes
- ★ Total time for completion took less than 45 man minutes
- ★ Estimated average cost for erection and removal \$330.00

We also have available an additional video tape (14 min edited version) which was made during a formal scaffold production efficiency comparison between tube & clamp and several types of the older modular systems material (which all required hammers during assembly) along with our advanced Excel design (no tools needed). The evaluation was actually controlled and filmed under the direction of Global Supply Group (GSG) at the request of Boston Edison at their Pilgrim Station training facility located in Plymouth, Mass. This event was by invitation only and each company represented was required to build the exact same scaffold structure in accordance with design drawings that were provided to them ahead of time by GSG. One major difference between the two actual erection demonstration video tapes enclosed is the diagonal corner gusset brace that was added to each horizontal bar shortly after the Pilgrim video was completed (prior to the TN video) which resulted in the Excel material design being even stronger, quicker and easier to use than it was previously. There were only a few standard guidelines that vendors participating in the GSG evaluation at Pilgrim actually had to meet which included the following:

- ✓ No limit was put on the amount of material or personnel that could be utilized
- ✓ No specified time limit was given for completion of erection and removal
- ✓ Erection had to be in strict accordance with all OSHA requirements
- ✓ Craft workers had to wear and use all the appropriate safety items (PPE)
- ✓ Vendors would not be able to see the exact erection location ahead of time
- ✓ Only one attempt was given to each vendor, no practice runs were allowed
- ✓ All vendors would be timed and video taped during their entire performance
- ✓ A formal comparison would be done to determine the most efficient material
- ✓ Each vendor had to sign a full release that allowed GSG to use all results freely

Upon completion of the week long scaffold performance evaluation process it was easily determined that Excel was far more efficient than all the other types of material demonstrated to Boston Edison and GSG. This independent study found Excel to be at least four to five times faster than tube & clamp and almost twice as fast as any of the older cup or wedge locking versions of modular system material utilized during the evaluation and filming that all required tools during the assembly process in order to complete material erection and removal.

Excel is currently in our third normal refueling outage which started April 3rd, 1998 using Excel modular system scaffold to successfully support BGE at their Calvert Cliffs (Unit-1) facility in Lusby, MD. The plant had previously utilized the older tube and clamp scaffold material only to support plant maintenance work activities. During the recent past, BGE had evaluated several other designs of modular scaffold systems (all required tools) and none were considered flexible and efficient enough to meet their particular needs until Excel identified Excel to BGE in the fall of 1995. Just prior to the Unit-1 outage during February and March of 1996, both contractor and utility personnel at Calvert Cliffs were cross trained on how to properly construct Excel modular scaffold in order to complement their existing tube & clamp inventory. Everyone caught on very quickly and all craft work crews were able to utilize Excel extremely effectively because of the very simple and user friendly clicklock end mechanism design which requires no tools during normal assembly and removal except to tie off seismically or when making a transition over to tube & clamp. Excel is currently providing Excel material on a long term lease purchase to BGE which will be used again to support

preoutage ISI work this fall for their next Unit-2 refueling shutdown at Calvert Cliffs which is currently scheduled to start in mid April 1999.

Excel just recently added Excel scaffold material to their ever growing product line. This is an ongoing effort to help our utility customers like your organization reduce their overall operating and maintenance expenditures to meet the competitive challenges brought about by the recent utility industry deregulation. Transitioning to Excel would enable your organization to dramatically lower their overall scaffold project costs in the future as compared to using other less efficient brands of tube & clamp or modular system scaffold currently supporting operational maintenance work evolutions during outage and non outage applications. Listed below are several of the key factors which make Excel so much more productive and cost effective when compared to using existing tube & clamp or any of the older designs of modular system scaffold (tools required) to support staging erection project work activities:

- ☺ Complement and replace approximately 65% to 75% of existing tube & clamp
- ☺ Typically expect 35% to 45% reduction in overall scaffold project expenditures
- ☺ Help meet shorter outage critical path duration's by reducing time allowed for staging
- ☺ Hammers and ratchet tools are normally not required during Excel scaffold construction
- ☺ Excel has the industries only positive locking horizontal bars currently available
- ☺ Telescoping, adjustable diagonal braces can also be used to support cantilevers
- ☺ Production efficiency is typically four to six times greater than existing tube & clamp
- ☺ Excel normally requires half the time to build as any other existing modular scaffold
- ☺ Will usually eliminate 8k to 12k man hours of work effort during an average refueling
- ☺ Can potentially save \$150 to \$300k on each and every shut down system wide
- ☺ Per outage Alara exposure dose savings on scaffold estimated at 4 to 6 manrem
- ☺ Contaminated scaffold management program to control costs and reduce inventory
- ☺ Pre approved lifting rigs will eliminate the need for using over engineered designs
- ☺ Vertical legs have node point moment connections every five and three quarter inches
- ☺ 40% to 45% fewer parts to handle during mobilization, construction and removal
- ☺ Modification of existing scaffold structures is much easier and quicker for builders
- ☺ Extremely user friendly, requires minimal cross training for total implementation
- ☺ Lower ratio of craft to laborers, which also allows for using smaller work crews
- ☺ Horizontal ledgers have one of the highest design load bearing capability available
- ☺ Tremendous construction flexibility, coupled with enhanced industrial safety benefits
- ☺ Excel's applicability is just as broad and far reaching to the fossil and cogen stations

Additionally, I would like to extend an open invitation to any of your organizational staff members that might be interested in touring one of our job sites where Excel material is being used to see in person exactly why this new modular scaffold material is so exciting and has everyone talking about it. We just recently supplied Excel to Vogtle (SNOC) for their third outage, Farley (SNOC), H. B. Robinson (CP&L), Clinton (IPC) and Brunswick (CP&L) Nuclear Power Plants to support their formal on site evaluations. Earlier this year we completed a very successful four week turn around for the Marathon Oil Refinery (2nd time) at their facility located in Texas City, Texas just south of Houston and used Excel beat our estimated production costs by almost 35%. This was a relatively large turn around for Marathon that made extensive use of Excel for all their staging applications to include approximately eighty hanging scaffolds, internal piping, tank inspections, boiler repair and multiple tool cribs. We also just provided Excel (2nd time) support for another major shut down with Georgia Pacific Paper Company at their Leaf River facility located in New Augusta, MS which included staging erection for all major work activities including : boiler work, tank replacements, digester repairs, Etc. It is difficult to believe, without actually seeing Excel in action first hand, that our

simple design change in modular system scaffold material could have such a dramatic impact on our customers production costs. Yet, each and every time we utilize Excel the end results are always the same, and Excel just keeps on reproducing these type of savings over and over again in every application regardless of the industry involved.

The following client facility personnel can provide user references on Excel's performance capability when compared to using existing tube and clamp material to support typical maintenance activities. They can also provide feedback pertaining to the amount of labor savings that was actually achieved and the associated reduction in staging completion time that was originally allowed on their master schedule.

- ◆ Calvert Cliffs (BGE) : Jack Simmons (410) 495-4893
- ◆ H. B. Robinson (CP&L) : Brian Hearn (803) 857-1562
- ◆ San Onofre (SCE) : Mike Misenburg (714) 368-9898 "craft"
- ◆ Vogtle (GPC) : Dave Moncus (706) 826-3150 "craft"
- ◆ Farley. (SNOC) : Tim Wilson (334) 899-5156, X-4769 "craft"
- ◆ Clinton (IPC) : Wayne Blazek (217) 935-8881, X-3271 "craft"
- ◆ Quad Cities (CWEC) : Rick Gero (309) 654-2241, X-2924 "craft"
- ◆ Pilgrim Station (BECO) : Mike Jackimowicz (508) 830-8815 "craft"
- ◆ Texaco Refinery, Star Plant (Convent, LA): Ron Anderson (504) 562-7681
- ◆ Air Products Chemical Plant (St. Gabriel, LA) : Mark Willard (504) 642-3346
- ◆ Mobile Oil Refinery (Paulsboro, NJ) : Walt Waryga (609) 224-3594 "craft"
- ◆ Marathon Oil Refinery (Texas City, TX) : Steve Sawyer (409) 945-2331
- ◆ Leaf River Paper Mill (New Augusta, MS) : Ellis Stevens (601) 964-7375
- ◆ City Public Service (San Antonio, TX) : Ron Matula (210) 978-3897
- ◆ Daikin Chemical Plant (Decatur, AL) : Alan Mitchell, BE&K (205)-351-6259
- ◆ Huntsman Chemical Plant (Port Neches, TX) : Lester Crooks (409) 724-4668
- ◆ Coastal Refinery (Corpus Christi, TX) : Ron Youder (512) 866-2111

Excel would like the opportunity to discuss in more detail with you and your other organizational staff personnel the exceptional ability that Excel has when utilized by our utility customers to significantly reduce their O&M expenditures. Please contact us at your earliest convenience and let us know when it would be convenient to set up an appointment for a meeting to further discuss in detail Excel's capabilities and how it can improve your organization's ability system wide to enhance management of their scaffold labor costs. Once you have had an opportunity to review the Excel video demonstrations, please pass them along to any other appropriate management personnel in your organization that are also directly responsible for the identification, evaluation and approval of new technology. Additionally, we are always available when ever it is convenient to put on a formal Excel modular scaffold classroom presentation along with a hands on erection demonstration outdoors in the near future for key management decision makers in your organization to include : supervisory personnel in your outage management, planning, ISI inspection, engineering group, maintenance, industrial safety and purchasing departments.

Thank you again for taking time to review our material on Excel modular system scaffold. I look forward to meeting with you in the near future to discuss various alternatives on exactly how your organization can streamline their existing scaffold program through the incorporation of Excel. If you have any additional questions or need any further Excel information in the mean time, please feel free to contact us directly either our corporate office in Plymouth, MA at 800-652-7712 or at my East Haddam, CT office at 860-873-9987.